

Career choice influences in Indian anaesthesiologists: A cross sectional survey

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Background : Many factors influence the decision of a graduate to pursue his postgraduate studies.

Method : A questionnaire was used to find out the career choice of the interns and the various practicing anaesthesiologists and their experience in this field.

Results : It is shown that radiology (21%) is the first choice of postgraduate study. Practicing anaesthesiologists cite enthusiasm or commitment (50%) as their top reason for joining anaesthesiology as a postgraduate.

Introduction

Large number of factors, namely individual, familial, financial and social factors influence undergraduate students in the selection of their future career. In addition the unrealistic portrayal of the medical profession in the present day scenario of explosive information over the media, sets in a complex pattern of motivation affecting their minds while entering medical schools. It is known that the medical graduates also rely on their own experience of the specialties as a student to guide their career choice for postgraduate studies¹. Clinical specialties have always dominated the career choice for post graduate studies. With the recent trend towards nuclear families in developing countries the career of both earning members of the family has a significant impact on the family fabric necessitating a swing towards pre and para clinical specialties for at least one member of the family. The statement saying that selection of specialization is often undertaken with only the vaguest of long term career plans is probably no longer true². Major specialties tend to offer greater choices of place of work with greater opportunities in more number of locations^{3,4}.

The specialty of Anesthesiology which was confined primarily to the operating room (OR) in

the yesteryears, has widened its scope in hospital practice considerably in last two or three decades.

Clinical Anesthesiologists are experts in fields as diverse as intensive care, obstetrics, trauma, cardiopulmonary and airway management, perioperative patient care and both acute and chronic pain management. In addition, individual anaesthesiologists have involved themselves in areas such as research, administration and teaching both at undergraduate and postgraduate level.

In fact recent estimates of UK Anesthesiologists have shown that they are involved in the care of about two-thirds of all patients admitted to hospital⁵. Despite these accomplishments, recognition of the anesthesiologists' vital role is yet to be fully appreciated. Lack of recognition is apparent not only from the general public and the media, but also from surgical and nursing colleagues⁶⁻⁸. Another area of concern is the stress at work mainly related to lack of control, over working schedule, poor interpersonal professional relationship and increasing work overload⁹⁻¹¹. In spite of these drawbacks it appears that recent medical graduates are getting attracted to Anaesthesiology due to its wide scope of work.

Junior doctors are increasingly aware of the fact that Anaesthesiology is one of the largest specialties in the clinical workforce and that opportunities in it are considerable. Even for senior doctors it is vital to stay abreast of employment changes as the scope and nature of work is changing rapidly. Increasing number of female anaesthesiologists now opt for part time working, job sharing, and flexible working. Very few studies on the choice of anaesthesia as a career have been reported from developing countries like Nigeria, Saudi Arabia, Sri Lanka and Pakistan¹²⁻¹⁵.

The aim of this present study is to look into the reasons for selection of Anaesthesiology as a career vis-à-vis other specialties by budding doctors during their internship training as well as to peep into the perceptions of prospective anaesthesiologists entering the field and also learn from those who are already established in the field, as to the limitations of this career choice to make it more attractive in the days to come. Deliberating on the reasons put forward by the interns and on the perceptions of prospective anaesthesiologists would help to suitably modify undergraduate and postgraduate curricula to make the specialty more competitive in comparing with other clinical specialities.

Materials and methods

A questionnaire was given to MBBS medical graduates of Pravara Institute of Medical Sciences (PIMS) during their internship training, from March 2006 to November 2007. A different questionnaire was given personally to practicing anaesthesiologists at National and State level Anaesthesiology conferences and CME with a request to return them duly filled in, insisting that it would only take a short time to complete it. Questionnaire to interns related to their first three choices for post graduate studies and to find out the reasons for opting for anaesthesia as a first choice by some of them. Practicing anaesthesiologists were asked to mention reasons which contributed to their choice of anaesthesia as a career assuring all concerned that confidentiality and anonymity would be maintained. Respondents were given a list of choices from which they had to choose one or more.

Interns from Rural medical college, Loni have been considered to be a representative sample from all states of India because admissions to undergraduate and postgraduate studies at PIMS a deemed university is open to students from all over the country after a competitive entrance examination.

Results

Response to questionnaire given to interns was hundred percent. Response to 200 questionnaires given to the practicing anaesthesiologists was 192 (96 % response rate). This high response rate was due to the fact that questionnaires were given and collected back personally.

Figure 1: First career choice of respondent interns for post graduation

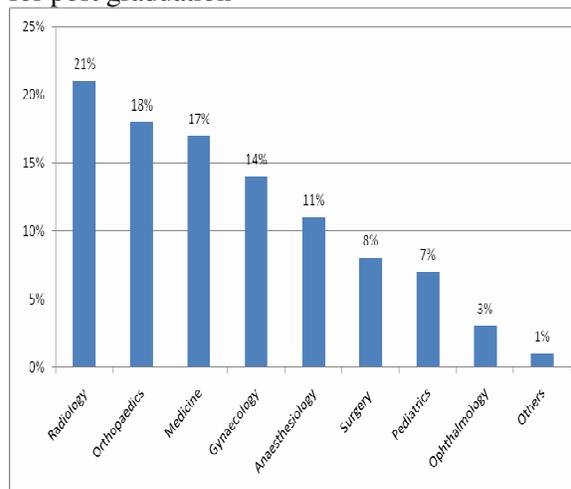
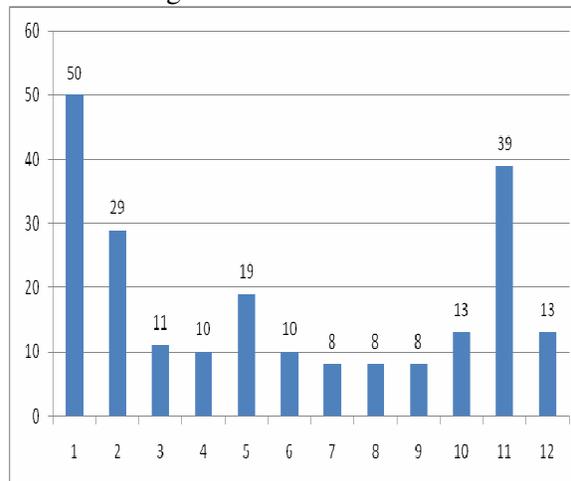


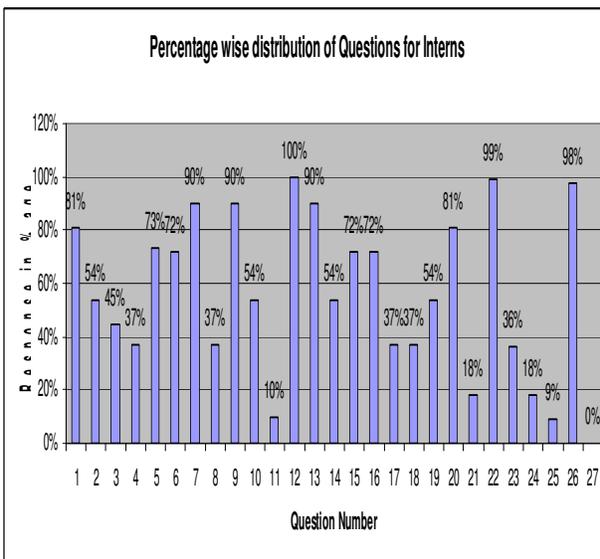
Figure 2: Reason for selecting anaesthesiology as a first career choice by respondent anaesthesiologists



1. Enthusiasm or commitment: what I really want to do and be. (26% -50)
2. Self appraisal of own skills and aptitudes. (15% - 29)
3. Perceived working experience of jobs undertaken so far. (6% - 11)
4. Hours or working conditions. (5% - 10)
5. Experience of chosen subject as a student. (10% - 19)
6. Promotional prospects. (5% -10)
7. Particular teacher or department. (4% - 8)
8. Domestic circumstances. (4% - 8)
9. Inclination before medical school. (4% - 8)
10. Advice from others. (7% - 13)
11. Future financial prospects. (20% - 39)
12. Other reasons. (7% -13)

9. It provides immediate gratification in ones work. 90%
10. It enables the clinician to perform invasive procedures. 54%
11. There is little post operative liability. 10%
12. No need for any personal setup or clinic. 100%
13. It is a career with immediate earning potential. 90%
14. Satisfaction observed by interacting with other anaesthesiologists. 54%
15. Fascination with the work in ICU and CCU's. 72%
16. No direct contact with the patient on O.P.D basis. 72%
17. Any of your relatives is an anaesthesiologist and you are influenced by their job. 37%
18. You are influenced by a particular teacher. 37%
19. You think that anaesthesia is a very easy subject that just involves spinal and general anaesthesia and few short procedures. 54%
20. You feel that the work is interesting and stimulating and provides adequate level of responsibility. 81%
21. You feel that it is a dangerous and risky job. 18%
22. You are impressed by the work of an anaesthesiologist in the OT when you went to see other surgeries. 99%
23. You feel that life and death of a patient depends on the anaesthesiologist. 36%
24. You think that there is a marital disharmony in the life of anaesthesiologists. 18%
25. You feel that it is a thankless job. 9%
26. You think that the surgeon gets more importance as compared to an anaesthesiologist. 98%
27. Other Reasons: 0%

Figure 3: Reasons for choosing anaesthesiology as a career among interns



1. It involves the clinical application of Anatomy, Physiology and Pharmacology. 81%
2. There is adequate time off. 54%
3. There is diversity of training experience. 45%
4. Prestige associated with the institution. 37%
5. Interest developed during internship. 73%
6. It is a profession with high value of satisfaction. 72%
7. The value of anaesthesiologists is increasing day by day. 90%
8. It's easier to obtain a post graduation degree in this field. 37%

Table 1: Age and gender wise distribution of practicing anaesthesiologists

Age wise distribution	Age in years	No. of respondents
	25 to 34	135 (70 %)
	35 to 44	36 (19 %)
	45 to 54	15 (8 %)
	55 to 64	4 (2 %)
	> 65	2 (1 %)
Gender wise distribution	Males	104 (54 %)
	Females	88 (46 %)

Discussion

Senior anaesthesiologists from UK have witnessed a time in UK when there were not enough applicants for anaesthesia training posts and some Regional Health Authorities did not advertise new posts at the Senior Registrar level because they were afraid that they would not be filled with suitable applicants¹⁶. Since that time, things have changed substantially for the better. From the data assimilated, there appears to be a general trend when assessed at both years 1 and 3 following qualification that anaesthesia is becoming more popular¹⁶. There is a huge gap between need and supply of qualified anaesthesiologists in India as well and all presently practicing anaesthesiologists are overworked. Shortage of anaesthesia practitioners in rural, tribal, hilly villages of India where nearly 60% of our citizens reside is much more acute. Reported figures from Government of India show shortage of nearly 6000 anaesthesiologists and only 30% of the population has satisfactory access to proper anaesthesia services of which 80% are urban beneficiaries¹⁷.

The aim of this survey was to assess the expectations and perceptions of interns as well as to find the reasons for selection of this speciality and fulfillment of their desires of currently practicing anaesthesiologists about various aspects of the speciality.

In this study anaesthesiology as a career was indicated by 11% interns and subjects like Surgery, Paediatrics, and Ophthalmology were less appealing. Main reason cited was minimal monetary investment for setting up anaesthesia practice where as specialities like Surgery, Medicine, Gynaecology and Paediatrics need not only a huge initial investment but also have a great competition from others already in the field with uncertainty of good returns. Most interns (99%) were very much impressed by anaesthesiologists work in operation theatre. An anaesthesiologist is the team leader in the operation theatre without whom the surgeon cannot commence the surgery. 98% of the interns felt that the surgeon gets greater importance as compared to an anaesthesiologist by the patients because of the nature of the job and greater exposure of surgeon pre and post operatively to

patients. But no association was found between this perception of interns and their selection of the speciality as a career. According to 90% of interns the demand and value of anaesthesiologists is increasing day by day due to disproportionate increase in the number of surgeons from different surgical fields as compared to the number of anaesthesiologists.

Safety of anaesthesia with modern anaesthetic agents and drugs has not only increased but also has provided the anaesthesiologists with greater control over the patients in pre, intra and postoperative phase. After successful surgery the anaesthesiologist is not bound to the patient and gets immediate gratification in majority of cases. This fact was realized by 90% of interns who considered immediate earning potential of this profession with a respectable income as a very attractive proposition. 81% of interns were attracted towards the speciality because of direct clinical application of knowledge of anatomy, physiology and pharmacology and they felt that the work was interesting and stimulating providing an adequate level of responsibility.

73% developed interests during internship indicating teaching during anaesthesia posting of internship was good. Even today there are some myths and ignorance regarding the speciality as revealed by the fact that more than half the interns thought anaesthesia is a very easy subject with routine and repeated administration of the same drugs for spinal and general anaesthesia. 18 % thought that the profession is a dangerous and risky job dealing with all the medical emergencies arising unexpectedly at odd times and in situations which are quite critical.

One of the reasons for not choosing anaesthesiology as a career is lack of recognition. Large number felt that it is a thankless job and the key role of an anaesthesiologist is not appreciated. Credit due to an anaesthesiologist for many good jobs done is not given to him/her on many occasions. On the contrary he/she is blamed by surgeons and others for untoward, unavoidable complications arising in operation theatre which are beyond his/her control. On occasions when surgeries last for longer duration than expected and are performed at odd hours the working schedule of an anaesthesiologist gets totally upset and becomes erratic. Anaesthesiologist may be

compelled to miss some important social gatherings and family functions, which at times leads to marital disharmony, stress and psychosocial breakdown. In our study 9% felt that it is a thankless job and 18% thought that there is a great possibility for marital disharmony in the life of an anaesthesiologist.

The main reason cited for selection of the speciality by practicing anaesthesiologists was enthusiasm and commitment followed by good financial prospects by 50(26%) and 39(20%) respectively. This is quite understandable at a younger age when one is bubbling with energy and looking forward to a safe comfortable future. Earlier studies have shown anaesthesiologists in general have a “introvert” personality which is reflected by 29 (15%) of anaesthesiologists who regarded self appraisal of own skills and aptitudes as their reason for taking up this career. Individual self experience as a student was another important reason but factors like promotional prospects, influence by a teacher or a department, domestic circumstances, inclinations before medical school and advice from others did not seem to have much influence to choose this career. Turner et al¹⁸ found more than 50% of medical graduates indicated enthusiasm/commitment and anticipated hours /working conditions to have a great deal of influence on career selection. Inclinations before medical school, domestic circumstances, influence of a particular teacher/department and future financial prospects were rated influential by less than 20 % of those choosing anaesthesia.

Raising the profile of the anaesthesiologist, both among the public and fellow health professionals is the responsibility of existing anaesthesiologists which should be considered as one of the top priorities. Public awareness of anaesthesia services and anaesthesiologists is far from satisfactory even now. This is basically due to the fault of anaesthesiologists in marketing themselves. They should constantly try to make the public aware of the importance of their work by establishing pre anaesthesia clinics, patient counseling, pain clinics, and trauma and critical care areas so that there is more exposure and better patient contact. In addition they should promote paramedical courses for training

anaesthesia technicians or assistants. These steps will enhance the public image and create a favorable public opinion of anaesthesiologists. Utilization of the facilities of “information and technology” in publishing about anaesthesia, anaesthesia related problems and in giving instruction in the management of disasters will go long way in raising the image of the speciality¹⁷.

To attract more and more students towards this specialty, undergraduate teaching should be made more interesting. Interns should get actively involved in routine clinical work like preanesthesia checkups, investigations, preparation of the patients and actual anesthesia techniques. Interns may be given the tasks of perioperative monitoring under constant supervisions and they should be introduced to labour analgesia, chronic pain management and ICU procedures during their anaesthesia term postings. A major step to reduce the shortage of anaesthesiologists will be to increase the number of post graduate seats.

From the lessons learnt from this study more and more budding doctors need to be attracted to the specialty by increasing current popularity of the specialty which would help not only to overcome the shortage but also attract talented young doctors to a speciality with bright future prospects.

It is felt that more multicentric studies on larger numbers would help in drawing final conclusions and taking suitable remedial measures.

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